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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,144

08/05/2005

Hirotsugu Kinoshita

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03/13/2009

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EXAMINER

GOLOBOY, JAMES C

ART UNIT

PAPER NUMBER

1797

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/522,144	<b>Applicant(s)</b> KINOSHITA ET AL.	
	<b>Examiner</b> James Goloboy	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Applicant's amendments filed 12/16/08 overcome the rejections set forth in the office action mailed 9/16/08. New grounds of rejection necessitated by the amendments are set forth below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita '085 in view of Ozaki (U.S. Pat. No. 5,585,336).

In Table 1 (columns 7-8), examples 2 and 7-8, Kinoshita '085 discloses grease compositions consisting of a lubricating base oil, a thickener, and diphenyl hydrogen phosphite. In columns 6-7 Kinoshita '085 provides the preparations of the thickeners, which meet the limitations of claims 4-5, and in column 3 lines 3-30 discloses that the

urea of claim 5 is a particularly preferred thickener. In column 5 lines 43-51 Kinoshita '085 discloses that the concentration of thickener falls within the range recited in claim 1. The diphenyl hydrogen phosphite meets the limitations of formula (1) of claims 1 and 6, where the X atoms are oxygen, two R groups are phenyl, and one R group is hydrogen. The composition of Kinoshita '085 therefore meets the limitations of claims 1 and 4-6.

In column 6 lines 16-28, Kinoshita '085 discloses that the grease can optionally contain further additives such as a metallic soap thickener, antioxidant, an extreme pressure agent, an oiliness agent, and a viscosity index improver. The antioxidant can be amines, meeting the limitations of the rust inhibitor of claim 1. The difference between Kinoshita '085 and the currently presented claims is that while Kinoshita discloses that the extreme pressure agent can be a zinc dithiophosphate, but does not specifically disclose the zinc dithiophosphates recited in claim 1.

Ozaki, in column 1 lines 6-8, discloses a lubricating grease for a joint. In column 2 lines 41-52, Ozaki teaches that the grease preferably comprises a zinc dialkylphosphate or diarylphosphate, as recited in claim 1. The use of this zinc dialkylphosphate or diarylphosphate as the zinc dithiophosphate in the composition of Kinoshita '085 meets the limitations of claims 1-2 and 4-6.

It would have been obvious to one of ordinary skill in the art to use the zinc dialkylphosphate or diarylphosphate of Ozaki as the zinc dithiophosphate extreme pressure agent of Kinoshita '085, as Ozaki teaches that it is a preferred additive in a urea-thickened grease for joints.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kinoshita '085 in view of Ozaki as applied to claims 1-2 and 4-6 above, and further in view of Pirro (Pirro, D.M. and Wessol, A.A., *Lubrication Fundamentals*, Marcel Dekker, New York, 2001, Second Ed, Chapter 4).

The discussion of Kinoshita '085 in view of Ozaki in paragraph 4 above is incorporated here by reference. Kinoshita '085 teaches that the grease can additionally contain a metal soap thickener but does not specifically disclose a lithium soap.

Pirro, in the "Thickeners" section, discloses metallic soap thickeners, including lithium soaps. In Table 4.1, Pirro teaches that lithium grease accounts for over half of production (footnote a), and that lithium soap greases are "The leader". The use of a lithium soap as the metallic soap thickener in the composition of Kinoshita '085 and Ozaki forms a composition meeting the limitations of claim 3.

It would have been obvious to one of ordinary skill in the art to use the lithium soap taught by Pirro as the metallic soap thickener of Kinoshita '085 and Ozaki, as Pirro teaches that it is the most common metal soap thickener.

### ***Response to Arguments***

6. Applicant's arguments been considered but are moot in view of the new grounds of rejection. The combination of the Kinoshita '085 reference with the Ozaki and Pirro references addresses the new limitations introduced by the amendment.

Applicant argues that “The examiner continues to ignore the fact that the compositions of Kinoshita I, which require boron nitride powders, cannot anticipate the grease composition of the claimed invention because boron nitride powders do not fall within the scope of a ‘consisting essentially of’ claim”. While now moot due to amendment, the examiner notes that applicant continues to fail to appreciate that the anticipation rejection over “Kinoshita I” (Kinoshita ‘683 as referred to in previous office actions) relies upon Comparative Example 6, which clearly does not contain a boron nitride powder. Whether Kinoshita teaches away from such a composition is not relevant to an anticipation rejection under 35 USC 102.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCG

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797